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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/544,192	08/02/2005	Noriyuki Kikuchi	285-05	8340
John F McNulty Paul & Paul 2900 Two Thousand Market Street Philadelphia, PA 19103			EXAMINER CADU'GAN, ERICA E	
			ART UNIT 3722	PAPER NUMBER
			MAIL DATE 03/28/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/544,192

**Applicant(s)**

KIKUCHI, NORIYUKI

**Examiner**

Erica E. Cadugan

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SG/US)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### ***Claim Rejections - 35 USC § 112***

2. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 2, line 3, “the extension” lacks sufficient antecedent basis in the claim. It is noted that in the “Remarks” section of the response filed 2/14/2008, Applicant has traversed this rejection, and provided a dictionary definition of the term “extension”, and further states that “[W]ith respect to antecedence, a lack of clarity arises when a claim refers to an element or limitation, and that element or limitation has not previously been recited; and/or where it is unclear as to what element the limitation is making reference”. However, Examiner notes that in the present circumstance, no “extension” of the table or pallet mount has been positively recited previously in the claim. It is noted that claim 2, line 1, sets forth that “wherein said table or pallet mount extends perpendicular to said spindle axis”. However, this is not, in and of itself, a recitation of an “extension” that “goes beyond the previous normal size” (to quote a portion of Applicant’s remarks), nor is it inherent that such an “extension” exists, i.e., the fact that the table or pallet mount extends perpendicular to the spindle axis is not inherently an indication that there is an “extension” that goes beyond the normal size of the table or pallet mount, noting that the vertical surface of the table 115 or pallet mount 112 that faces the spindle lies in a plane or “extends” perpendicular to the spindle axis”.

In claim 2, lines 5-6, the amended limitation “each include a said pallet mounting surface on the side of said pallet support member where said pallet moves being arranged in parallel to said pallet mounting support surface” is unclear. Note that it appears that the limitation is setting forth that a pallet mounting surface is parallel to itself, which is unclear.

Additionally, in claim 2, lines 5-6 as amended, “the side of said pallet support member where said pallet moves...” lacks sufficient antecedent basis, noting that no such side where a pallet moves was previously set forth in the claim.

***Claim Rejections - 35 USC § 102***

3. Claims 1-2 are rejected under 35 U.S.C. 102(f) because the applicant did not invent the claimed subject matter. Note that U.S. Patent Application Publication 2006/0260907 to Ota (having no common inventor with the present application, but having a common assignee), which is the published version of application serial number 10/541,430 application, teaches every limitation of each of the present claims. See at least Figures 1-9 of the published Ota application.

4. Claims 1-2, 2 is as best understood in light of the above rejection under 35 USC 112, are rejected under 35 U.S.C. 102(b) as being anticipated by WO 02/00388 to Geiger et al.

WO '388 is not in the English language. However, U.S. Pat. No. 6,826,821 to Geiger et al. is in the same patent family, and is being relied upon as an English equivalent to the WO '388 reference. Thus, all references to column and line numbers herein are with respect to the '821 patent.

Geiger teaches a machine tool system including a plurality of machine tools 36 (36a-36f) laid out in various configurations (see Figures 4 and 14, for example; Figure 1 shows a detail of an individual machine tool 36). Note that Geiger teaches a machine tool having a horizontal main spindle 10 having a tool 16 mounted at a front end thereof, and “table” or “pallet-mounting plate” 26/29 is mounted “facing” the front surface of the spindle 10 (such that a vertical surface of 29 is perpendicular to the horizontal spindle axis as viewed in at least Figure 7), and detachably mounts a “pallet” 31 which has a vertical surface to/on which a workpiece 15 is affixed (see Figures 1, 7, noting that Figure 7 shows the table/pallet-mounting plate 26/29 positioned facing the spindle 10, noting also that 26 is a turntable device for rotating member 29 about a vertical axis. Thus, with respect to the new limitations in claim 1, note that when the turntable 26 is rotated about the vertical axis by 180 degrees from the position shown in Figure 1 (to a position like that shown in Figure 7, for example), the workpiece 15 which is fixed on the “pallet” 31 vertical surface, the “pallet” 31 vertical surface, and the table/pallet-mounting plate 26/29 are positioned in front of the spindle 10 along the horizontal spindle axis, “in this order from the spindle”, when the turntable is rotated to the position such that the workpiece faces the spindle so that “said machine tool machines a workpiece fixed on said pallet vertical surface” as claimed.

Additionally, note that Geiger teaches various embodiments of a supply and take-down equipment arrangement or “pallet exchanger” 41, 61, 72 (see Figures 1 and 8-14) which are used to deliver a pallet 31 to or remove a pallet 31 from a desired machine tool 36a-f (see especially figures 4 and 14), and which pallet exchangers travel along a “track” 38 from one machine tool to another, and back and forth from a “pallet stocker” area 59/60, see Figure 4, for example, also

col. 5, lines 7-21, for example. For example, “pallet exchanger” 61 is shown in Figures 8-12, and has a base, such as, for example, element 42 (other elements could likewise or alternatively be considered a base), a “pallet support member” including, for example, at least element 55 (see Figures 9-12) which “rotates” about vertical axis 68 “in an indexing manner” (see col. 6, lines 2-26, for example, and especially note the pivoting or rotating motion as illustrated in Figures 10-12, which illustrate the rotation movement of 55 about the vertical pivot axis 68, described specifically as vertical in col. 6, line 11). Further note that the “pallet support member”, which includes at least element 55, includes “at least two vertical pallet-mounting surfaces”, such as the vertical pallet gripping surfaces on the gripper jaws 56 of element 55 (note that in Figure 9, axis 68 is the vertical rotation axis, and that jaws 56 have pallet gripping surfaces extending into the plane of the paper that are parallel to that axis).

Also re claim 1, it is noted that there would appear to be nothing preventing the gripper jaws 56 of element 55 from gripping two pallets at the same time such that one of the pallets contacted one of the gripper jaw 56 vertical surfaces and the other of the pallets contacted the other gripper jaw 56 vertical surface. Note that the claim is drawn to a “pallet changer” having an intended use of “changing a pallet”, and not to the combination of the pallet changer and pallet(s) (nor the combination of the pallet changer and machine tool for that matter).

Additionally, re the claimed “pallet moving means”, note that the motor 69 and gearbox 66 are used to perform the rotation motion of 55 about the vertical axis 68, and are thus considered to be the claimed “pallet-moving means for moving the pallet (31), in a vertical state”, between the table/pallet-mounting plate 26/29 and the “pallet support member” including at least 55 to thereby exchange the pallets (see Figures 8-14 and col. 6, lines 2-26).

Re claim 2, see Figures 4 and 14, noting that the “pallet support member” including, for example, at least element 55, is movable along the track or conveyor path 38 in a horizontal direction perpendicular to the horizontal spindle axis (see also Figure 1, noting the configuration and location of path 38 relative to the horizontal spindle axis) to positions such that it is “arranged in the extension of said table or said pallet mount in the horizontal direction perpendicular to the spindle axis” as claimed.

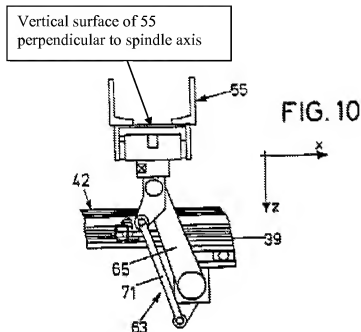
Additionally, re claim 2, note that the “pallet support member” including, for example, at least element 55, on a side (such as the right side as viewed in Figures 1, 9, and the top side as viewed in Figures 10-12, noting the orientation of 38/39 shown in Figures 9-12) of the pallet support member (55 would be located at the left of Figure 1) where the pallet 31 moves when it is held by 29 (see Figure 1), is able to be arranged “in parallel” to a pallet mounting surface of the table/pallet mount 26/29 (see Figures 1 and 9-14, for example).

Also, re claim 2, note that the “table” or “pallet mount” 26/26 has surfaces (at least the vertical left and right surfaces as viewed in Figure 1) that extend perpendicularly to the horizontal spindle Z axis (see Figure 1). Note also that the “pallet support member” including at least element 55 is movable to a position in the horizontal direction perpendicular to the spindle axis (along path 38, for example, as shown in Figure 4) such that it can be considered to be “arranged” in an extension (see Figure 1, noting that the path 38 is ultimately connected to/ultimately extends from the table/pallet mount 26/29) of the table/pallet-mount 26/29).

Furthermore, note that the “pallet support member” (including at least element 55) includes a vertical surface that is arranged such that it is capable of contacting a pallet surface and that is arranged in parallel to the “pallet mounting surface” of the “pallet mount” 26/29 that

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is perpendicular to the spindle axis as labeled below in Figure 10 (noting that Figure 10 is a top view).



Note also that it does not appear that claim 2 requires the “pallet mounting surface of said pallet mount” to be perpendicular to the spindle axis, and that the previously described vertical mounting faces of the arms or jaws 56 are parallel to the pallet mounting surface of the pallet mount 26/29 at various points in time, again noting that 26/29 rotates about a vertical axis.

Additionally/alternatively, it is noted that vertical pallet mounting surfaces of the two members 55 are shown in parallel to one another.

#### ***Response to Arguments***

5. Applicant's arguments filed August 9, 2007 have been fully considered but they are not persuasive.



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6. Specifically regarding the rejection of claims 1-2 under 35 USC 102(f) in view of the Ota reference (US 2006/0260907), Applicant makes a number of assertions, which were already addressed in detail in the advisory action mailed January 30, 2008. For Applicant's convenience, the responses to these assertions will be repeated hereinbelow:

Additionally, regarding the rejection under 35 USC 102(f) of claims 1-2 over US Patent Application Publication 2006/0260907 to Ota (which is the published version of 10/541430, which has no common inventor with the present application and which has a common assignee with the present application), Applicant has made a number of remarks/assertions.

Firstly, it is noted that Applicant filed a new Terminal Disclaimer (which incidentally was unnecessary as the one previously filed on August 9, 2007 was approved to overcome the previous obviousness-type double patenting rejections, as was indicated in the final rejection mailed October 15, 2007), apparently in an attempt to overcome the rejection under 35 USC 102(f) by including a statement that the two inventions were commonly owned or assigned at the time the claimed invention was made. However, as also indicated in the final rejection mailed Oct. 15, 2007, such a statement would "only" serve to preclude a rejection based on the Ota reference that was based on 35 USC 103(c), and would not in any way preclude the Ota reference from being applied under 35 USC 102(f). Applicant notes, correctly, that no 103 rejection based on Ota is at issue. However, again, such statement is not relevant re the pending 102(f) rejection.

Applicant further asserts that one reason for Applicant's traversal of the 102(f) rejection is that "[T]he presently claimed invention by applicant is a different invention from the invention claimed by Ota. Applicant claims "A pallet changer...". The reference Ota claims "A machine tool facility..." However, what Ota "claims" is irrelevant to the determination of whether Ota teaches the presently-claimed invention for the purposes of 102(f). (Note that the issue is a 102(f) rejection, and that the double patenting issue has already been settled with the terminal disclaimer filed in August of 2007). As set forth in the final rejection, Ota discloses each claim limitation of the present claims.

Note: the same 35 USC 102(f) rejection of the claims based on the Ota reference that was present in the final rejection is also set forth above, and thus, any comments relevant to the 102(f) rejection set forth in the final rejection are also relevant to the above 102(f) rejection.

Applicant asserts that another reason for the traversal of the 102(f) rejection is that "Both inventions are owned by the same entity..." Again, common ownership does not preclude a rejection under 102(f). See at least MPEP section 706.02(l)(1), as outlined on page 10 of the final rejection.

Applicant additionally asserts that another reason for the traversal of the 102(f) rejection is that "Both patent applications to applicant's invention and to the Ota invention have the same priority date of December 3, 2004", and that "Both priority dates arise from International Applications filed in the Japanese Receiving Office on the same day." Applicant further states that "There is no evidence to substantiate that the Ota invention was 'made' under U.S. Patent Law before applicant's invention was made. Likewise there is no evidence that applicant's invention was made before the Ota invention. Therefore, each application is precluded from being used as a reference against the other."

However, this is not persuasive. As outlined in at least MPEP section 2137, "35 U.S.C. 102(f) does not require an inquiry into the relative dates of a reference and the application, and therefore may be applicable where subsections (a) and (e) are not available for references having an effective date subsequent to the effective date of the application being examined". Note that 35 USC 102(f) states that "A person shall be entitled to a patent unless he did not himself invent the subject matter sought to be patented", and that the Ota publication teaches all aspects of the presently-claimed invention and has NO COMMON INVENTOR with the present application.

7. Additionally, re the 35 USC 102(b) rejection based on the Geiger reference, Applicant has asserted that the Geiger reference does not teach the new limitation “said pallet defining a vertical surface for fixing a workpiece, so that said workpiece which is fixed on said pallet vertical surface, said pallet vertical surface, and said table or pallet mount are positioned in front of said spindle along said horizontal axis, in this order from said spindle, when said machine tool machines a workpiece fixed on said pallet vertical surface”. However, this is not persuasive, and attention is directed to the 35 USC 102(b) rejection set forth above, which addresses this new limitation in detail.

#### *Conclusion*

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erica E. Cadugan whose telephone number is (571) 272-4474. The examiner can normally be reached on M-F, 6:30 a.m. to 4:00 p.m., alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Monica S. Carter can be reached on (571) 272-4475. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

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like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Erica E Cadugan/  
Primary Examiner  
Art Unit 3722

cec

March 26, 2008